# AMERICAN AUDIO

# Q-2422/SX Professional Preamp Mixer



# **USER INSTRUCTIONS**

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#### INTRODUCTION

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# **Important Precautions**

- 1. Be sure to save the packing carton in case you ever have to return the unit for service.
- 2. Read all documentation before attempting to operate your new mixer. Please save all your documentation for future reference.
- 3. Do not spill water or other liquids in to or on to your mixer.
- 4. Be sure that the local power outlet matches that of the required voltage for your mixer.
- Do not attempt to operate this unit if the power cord has been frayed or broken.
   Please route your power cord out of the way of foot traffic.
- 6. Always have the front gain controls set to their lowest level during initial power-up to prevent speaker damage.
- 7. Disconnect from main power before making any type of connection.
- 8. Do not remove the top cover under any conditions. There are no user serviceable parts inside.
- 9. Disconnect the unit's main power when left unused for long periods of time.

# Introduction

#### Introduction:

Congratulations and thank you for purchasing the American Audio® Q-2422/SX™ mixer. This mixer is a representation of American Audio's continuing commitment to producing the best and highest quality products at an affordable price. This mixer includes several innovative features that pack a big punch! The Q-2422/SX™ comes with a 2 year limited warranty!

Please read and understand this manual completely before attempting to operate your new mixer. This booklet contains important information concerning the proper and safe operation of your new mixer.

# **Set-Up Precautions:**

Please make any connections before you plug the unit in. Be sure the Power switch is in the OFF position before connecting other devices to the mixer. All fader and volume controls should be set to 0 or minimum position, before the device is switched on. If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch on the mixer immediately. The arising condensation of water might damage your device. Leave the device switched off until it has reached room temperature.

# **ELECTRICAL SAFETY PRECAUTIONS**



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

# CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER (OR BACK). THERE ARE NO USER SERVICEABLE PARTS INSIDE REFER SERVICE TO YOUR AUTHORIZED AMERICAN AUDIO® SERVICE TECHNICIAN.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

# IMPORTANT SAFETY INSTRUCTIONS

- **READ INSTRUCTIONS** All the safety and operating instructions should be read before the product is operated.
- RETAIN INSTRUCTIONS The safety and operating instructions should be retained for future reference.

  HEED WARNINGS All warnings on the product and
- in the operating instructions should be adhered to.

  FOLLOW INSTRUCTIONS All operating and use instructions should be followed.
- instructions should be followed.

  CLEANING The product should be cleaned only with a polishing cloth or a soft dry cloth. Never clean with furniture wax, benzine, insecticides or other volatile
- liquids since they may corrode the cabinet.

  ATTACHMENTS Do not use attachments not recommended by the product manufacturer as they may cause hazards.
- WATER AND MOISTURE Do not use this product near water — for example, near a bathtub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.
- ACCESSORIES Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.
- CART A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.



- VENTILATION Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
- POWER SOURCES This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company.
- **LOCATION** The appliance should be installed in a stable location.
- NONUSE PERIODS The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

#### GROUNDING OR POLARIZATION

- If this product is equipped with a polarized alternating current line plug (a plug having one blade wider than the other), it will fit into the outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
- If this product is equipped with a three-wire grounding type plug, a plug having a third (grounding) pin, it will only fit into a grounding type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding type plug.

  POWER-CORD PROTECTION Power-supply cords
- POWER-CORD PROTECTION Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.
- OUTDOOR ANTENNA GROUNDING If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure
- LIGHTNING For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.

  POWER LINES An outside antenna system should
- POWER LINES An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.
- OVERLOADING Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

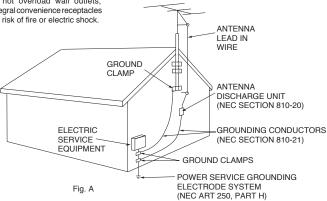
- OBJECT AND LIQUID ENTRY Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
- SERVICING Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

  DAMAGE REQUIRING SERVICE Unplud this product
- DAMAGE REQUIRING SERVICE Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
- service personnel under the following conditions:

  When the power-supply cord or plug is damaged.
- If liquid has been spilled, or objects have fallen into the product.
- If the product has been exposed to rain or water.
- If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
- If the product has been dropped or damaged in any way.
- When the product exhibits a distinct change in
- performance this indicates a need for service.

  REPLACEMENT PARTS When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
- SAFETY CHECK Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition
- is in proper operating condition.

  WALL OR CEILING MOUNTING The product should not be mounted to a wall or ceiling.
- HEAT The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.



NEC - NATIONAL ELECTRICAL CODE

# **SAFETY PRECAUTIONS**

#### **CAUTION:**

- 1. Handle the power supply cord carefully. Do not damage or deform; it may cause electric shock or malfunction when used. Hold plug attachment when removing from wall outlet. Do not pull on the cord.
- 2. To avoid electric shock, do not open the top cover when the unit is plugged in. If problems occur with the unit, call your local American Audio® dealer.
- 3. Do not place metal objects or spill liquid inside the mixer. Electric shock or malfunction may occur.

The serial and model number for this unit is located on the rear panel. Please write down the numbers here and retain for future reference.

Model No	 	 	
Serial No			

**NOTE:** This product satisfies FCC regulations when shielded cables and connectors are used to connect the unit to other equipment. To prevent electromagnetic interference with electrical appliances such as radios and televisions, use shielded cables and connectors for connections.

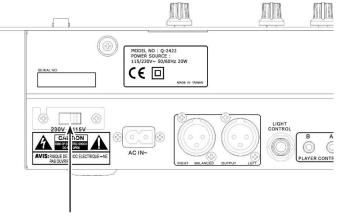
**WARNING:** TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO WATER OR MOISTURE

CAUTION: TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE, OR OTHER OUTLET UNLESS THE BLADES CAN BE CAREFULLY INSERTED TO PREVENT BLADE EXPOSURE

ATTENTION: POUR PREVENIR LES CHOCS ELECTRIQUES NE PAS UTILISER CETTE FICHE POLARISEE AVEC UN PROLONGATEUR, UNE PRISE DE COURANT OU UNE AUTRE SORTIE DE COURANT, SAUF SI LES LAMES PEUVENT ETRE INSEREES A FOND SANS EN LAISSER AUCUNE PARTIE A DECOUVERT.

#### LINE VOLTAGE SELECTION

- The desired voltage may be set with the VOLTAGE SELECTOR switch on the rear panel (using a flat head screw driver).
- Do not force the VOLTAGE SELECTOR switch as this may cause damage
- If the VOLTAGE SELECTOR switch does not move smoothly, please contact a qualified service technician.



Voltage Selector Switch

# **CUSTOMER SERVICE**

**Customer Support:** American Audio® provides a toll free customer support line, to provide set up help and to answer any question should you encounter problems during your set up or initial operation. You may also visit us on the web at www.AmericanAudio.us for any comments or suggestions. For service related issue please contact American Audio®. Service Hours are Monday through Friday 9:00 a.m. to 5:00 p.m. Pacific Standard Time.

Voice: (800) 322-6337 Fax: (323) 582-2610

E-mail: support@AmericanAudio.us

**Warning!** To prevent or reduce the risk of electrical shock or fire, do not expose this unit to rain or moisture.

**Caution!** There are no user serviceable parts inside this unit. Do not attempt any repairs yourself, doing so will void your manufactures warranty. In the unlikely event your unit may require service please contact customer support. Please do not return to your dealer without first contacting customer support.

# **QUICK START**

American Audio would like to thank you for your purchase of this great product. For those of you that are to impatient to read the entire user manual we have compiled these quick start instructions. We hope that you will at least read through these instructions to familiarize yourself with the basic understanding of the unit. The Q-2422/SX is part of American DJ's continuing evolution in audio technology. This unit has been built and designed with the typical DJ in mind, by DJ's. We have attempted to provide you with the most reliable product on the market by only using components made from quality products.

**MASTER LEVEL** - Use this level control to set your volume output. Try never to send an output of more than +4dB to your system. A signal at levels higher than this will start to distort and may cause damage to your system and speakers. Remember that a distorted signal from your mixer will only be multiplied throughout your system.

**CHANNEL TRIM LEVEL -** The channel trim levels are not to be used as volume controls, never use the channel trim to set the output volume. These controls are used to aid in distortion control. Use this control to preset your signal level before the crossfader. With your channel fades in the maximum position, use the channel trim level to set an average output level of about +4dB on you master level meter.

**HEADPHONES** - To avoid sever hearing damage always be sure the headphone level is set to minimum before plugging them in. Never put the headphones on without making sure the headphone level is turned down.

**MAIN MIC** - The main mic connector uses a Nuetrik combo plug which allows you to connect either a 1/4" unbalanced jack or by a standard 3-pin XLR balanced connector. The main mic also has an independent volume control with separate high and low level adjustments. If feedback occurs when using the mic, try lowering the "low" frequency level, this may reduce feedback. Always leave the mic level to it's minimum level when not in use.

**PHONO/AUX/LINE SWITCH (5)** - This switch is used to change the selected input from phono to line and vice versa. Channels 1 and 2 may be switched PHONO/AUX or LINE. Channel 3 may be switched LINE 3 or LINE 4. The selectors for AUX1/PHONO1 and AUX2/PHONO2 are on the rear panel (36).

#### **FEATURES**

# **Main Features:**

- Equipped with high quality Crossfader (Replaceable)
- Optical Detecting Fader for Q-Start Control
- High Power Headphone Output
- Selectable Voltage 115v~230v
- 3 Channel Mixer
- 2 Phono, 4 Line, 2 Auxiliary Inputs
- 2 Microphone Input (1) XLR/ 1/4" combo plug, (1) 1/4" Input Jacks
- Volume Control for each Mic
- Master Balance Control
- 12v BNC Light Connector for Gooseneck Light
- Fader "Q" Start
- On/Off Switch Controls Fader "Q" Start Function (for use with the American Audio CD Players with Fader "Q" Start)

- -30dB Rotary Kills for Treble, Bass & Mids on all three channels
- Individual Channel Gain Control
- Convenient "L" Shape Design
- Soft-touch rubber knobs for better control
- Extremely clean signal to noise ratio
- Light Control Signal Output Jack
- Talkover switch- Reduces channel output gain by 15dB +/- 2 dB
- Independent Zone Level Output
- Stereo LED Level Indicator
- Split Cue Monitoring
- Cue Mixing
- Balanced XLR Master Output
- 4 Signal Output Options Master (RCA and Balanced XLR), Zone (RCA) and REC (RCA)

Specifications subject to change without notice.

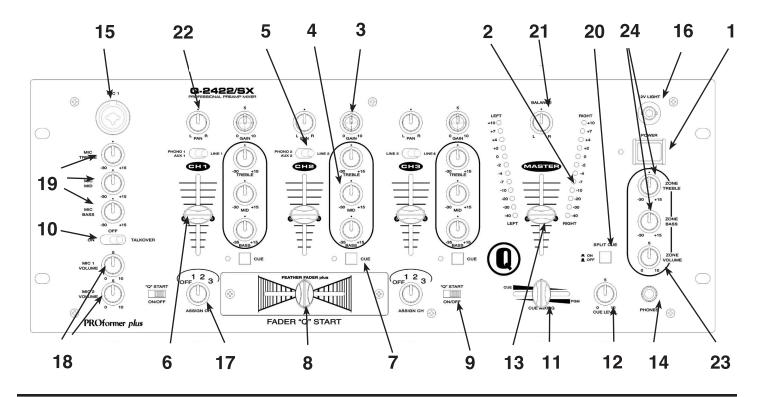
# **WARRANTY REGISTRATION**

The Q-2422/SX<sup>™</sup> carries a two year (730 days) limited warranty. Please fill out the enclosed warranty card to validate your purchase. All returned service items whether under warranty or not, must be freight pre-paid and accompany a return authorization (R.A.) number. The R.A. number must be clearly written on the outside of the return package. A brief description of the problem as well as the R.A. number must also be written down on a piece of paper and included in the shipping container. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. You may obtain a R.A. number by contacting customer support at (800) 322-6337.

# **UNPACKING**

Every Q-2422/SX<sup>™</sup> has been thoroughly tested and has been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect your mixer for any damage and be sure all equipment necessary to operate the mixer has arrived intact. In the event damage has been found or parts are missing, please contact our toll free customer support number for further instructions. Please do not return the mixer to your dealer without first contacting customer support.

# **FRONT PANEL - CONTROLS AND FUNCTIONS**



#### 1. POWER SWITCH -

This is the main power ON/OFF button. A yellow LED below the power switch will glow when power is ON. Before you turn the power on be sure you have made all connections to the mixer. Also be sure you amplifiers are turned off. Remember mixer on first and turned off last.

#### 2. MASTER LEVEL INDICATORS -

The dual MASTER LEVEL LED indicators along the top of unit is used to detail the master output level. The meter will detail the output level of the left and right channels.

#### 3. CHANNEL GAIN CONTROL -

This adjustment is used to adjust an audio source signal input gain for a channel. Never use the gain control to adjust output volume. Setting the gain level properly will ensure a clean output signal. An improper gain level adjustment will send a distorted signal throughout the entire audio line. To properly set the gain level control:

- 1. Be sure the MASTER VOLUME CONTROL (13) is set to minimum (zero output).
- 2. Set the CHANNEL FADER (6) to level 7.
- 3. Begin play on an audio source connected to the channel you are adjusting.
- 4. Turn the CUE (7) function on for the channel you are adjusting.
- 6. Use the **GAIN CONTROL** to adjust an average output volume of +4 dB in the **LED LEVEL INDICATOR (2).**

#### 4. CHANNEL EQ SECTION -

**CHANNEL BASS EQUALIZER -** Each of the three channels come with a BASS signal output EQ. These controls are used to increase (up to +15dB) or decrease (down to -35dB) the LOW range output signal. Turn the knob counter-clockwise to decrease a value or clockwise to increase a value.

# FRONT PANEL - CONTROLS AND FUNCTIONS CONT.

**CHANNEL MID RANGE EQUALIZER -** Each of the three channels come with a MID signal output EQ. These controls are used to increase (up to +15dB) or decrease (down to -30dB) the MID range output signal. Turn the knob counter-clockwise to decrease a value or clockwise to increase a value.

**CHANNEL TREBLE FREQUENCY EQUALIZER -** Each of the three channels come with a HIGH signal output EQ. These controls are used to increase (up to +15dB) or decrease (down to -30dB) the HIGH frequency output signal. Turn the knob counter-clockwise to decrease a value or clockwise to increase a value.

#### 5. SOURCE SELECTOR SWITCH -

These are two-position switches. The switches are used to select the input source assigned to each channel. Each channel may only be assigned one input source at a time.

#### 6. CHANNEL FADER -

Each channel fader is used to control the output level of the channel's selected input source.

#### 7. CUE BUTTONS -

These buttons are used to activate a channels "CUE" mode. A red LED above the cue button will glow when cue mode is activated. Cue mode will send a channels incoming signal to the headphones. The cue level is adjusted by the **CUE LEVEL ADJUSTMENT KNOB (12).** Be sure the cue level is set to minimum before putting your headphones on. Be sure to slide the **CUE MIXING SLIDER (11)** to the cue position to hear the selected channel source.

#### 8. FEATHER FADER PLUS™ CROSSFADER -

The **CROSSFADER** blends the output signals of any channels assigned to "Left" or "Right." When the fader is in the full "Left" position, the output signal of any channels assigned to "Left" will be controlled by the **MASTER VOLUME LEVEL (13)**. The same fundamentals will apply for "Right." Sliding the fader from one position to another will vary the output signals of the "Left" and "Right" channels respectively. When the crossfader is set in the center position, the output signals of both the "Left" and "Right" channels will be even.

#### 9. "Q" START ON/OFF -

This function works in conjunction with a compatible American Audio® "Q" series professional CD player. When used with a compatible "Q" series CD player, you can use the **CROSSFADER (8)** to start and stop the CD Player. The ON/OFF "Q" START switch activates this FADER "Q" START feature. When in the ON position, the FADER "Q" START function allows the fader to return automatically to the CD players preset cue point by simply sliding the **CROSSFADER (8)** back and forth.

For example, each time you slide the crossfader to the far left, the "Q" start function will trigger the play mode for any CD player connected to **PLAYER CONTROL "A" (30).** Play will begin at that unit's last set cue point. Turn the **"Q" ON/OFF SWITCH** to the OFF position to disengaged "Q" Start function and resume normal fader operation.

#### 10. TALKOVER SWITCH -

While in the ON position the microphone can be used at any time, while this will not attenuate any other channels. When the switch is in the TALKOVER position, the microphone is hot, meaning that when the microphone is in use all channels attenuate -15dB except the MIC. When the microphone is not being spoken into all channels return to normal. In the OFF position, all signals return to their

# FRONT PANEL - CONTROLS AND FUNCTIONS CONT.

original level and the microphone is off.

#### 11. CUE MIXING CONTROL -

This functions allows you to monitor the Cue level as well as the Program (main output) level in your headphones. A channels Cue Level may only be monitored if the channels Cue function is selected. To select a channels cue function depress the **CUE BUTTON** (7) that is directly associated with the specific channel you wish to monitor. You may use the mixing function to blend both the Cue level and the Program level together. You can vary the output level to either hear more or less of either of the two levels. Sliding the Cue Mixing fader to the CUE position will allow you to hear more of the Cue level. Sliding the knob to the PGM position will allow you to hear more of the Program level (main output). You may also use the Cue Mixing Control to hear either the Cue level or the Program level exclusively. If the fader is in the full CUE position you will only hear the cue level, if the fader is in the full PGM position you will only hear the main output. This function will especially be useful for occasions when an external monitor is not available.

#### 12. CUE LEVEL VOLUME CONTROL -

This knob is used to control the headphone volume output level.

#### 13. MASTER VOLUME CONTROL -

This fader is used to control the master output level (main volume). To avoid distorted output try to maintain an average output signal level +4 dB. This fader will control the **XLR-BALANCED** (28) output jacks and **MASTER VOLUME RCA** (31) jacks.

#### 14. HEADPHONES JACKS -

This jack is used to connect your headphones to the mixer. Use head phones only rated at 8 ohms to 16 ohms. Most DJ headphones are rated at 16 ohm, these are highly recommended. Always be sure the **CUE LEVEL VOLUME (12)** is set to minimum before you put the headphones on.

#### 15. MIC 1 INPUT JACK -

Combination Microphone Plug. This jack will accept a standard 1/4" male plug or a XLR 3-pin balanced male plug. The volume output level will be controlled by the **MIC 1 VOLUME CONTROL KNOB** (18).

#### 16. BNC JACK -

This jack is used to supply a 12V DC signal to a gooseneck light, such as the American Audio® GNL-14.

#### 17. FADER ASSIGN SWITCH -

This is a four position switch that assign a channel to the CROSSFADER (8). When a channel is assigned to the left side of the CROSSFADER (8) that channels output level will be controlled by the CROSSFADER (8). Sliding the CROSSFADER (8) to left position will send full volume output to the MASTER VOLUME LEVEL (13) and sliding the CROSSFADER (8) to right position will cut that channels volume to MASTER VOLUME LEVEL (13). The reverse is true for the right channel fader assign switch.

#### 18. MIC 1 and MIC 2 VOLUME CONTROL KNOBS -

These knobs are used to adjust the microphone volume output level of MIC 1 (15) and MIC 2 (38).

# FRONT PANEL - CONTROLS AND FUNCTIONS CONT.

#### 19. MICROPHONE EQ SECTION -

MIC BASS CONTROL - This knob is used to adjust the low frequency output of both MIC 1 (15) and MIC 2 (38). Turning the knob in clockwise direction will increase the low frequencies, turning the knob in a counter-clockwise direction will decrease the low frequencies.

**MIC MID CONTROL** - This knob is used to adjust the mid range frequency output of both **MIC 1 (15)** and **MIC 2 (38)**. Turning the knob in clockwise direction will increase the mid range frequencies, turning the knob in a counter-clockwise direction will decrease the mid range frequencies.

MIC TREBLE CONTROL - This knob is used to adjust the high frequency output of both MIC 1 (15) and MIC 2 (38). Turning the knob in clockwise direction will increase the high range frequencies, turning the knob in a counter-clockwise direction will decrease the high range frequencies.

#### 20. SPLIT CUE -

This button will activate the "Split Cue" function. When used with a set of stereo head phones, the Split Cue function assign the Cue signal the left channel of the headphones and assigns the Program (main output) signal to the right channel of the headphones. Essentially splitting the cue signal in half. Please note that this function will only work with a set of stereo headphones.

#### 21. MASTER LEVEL BALANCE CONTROL -

This knob controls the balance level output of the **MASTER VOLUME FADER (13)**. The knob has center lock position for precise center panning. Turning the knob to the "L" (counter-clockwise) position will increase the left channel output level. Turing the knob to "R" (clockwise) position will increase the right channel output level, while decreasing the left. To maintain a true stereo sound, level the balance control knob set to the 12 O'clock, or center position.

#### 22. PAN CONTROL -

The balance control for each channel, or how much left and right signal is sent to the left and right MASTER OUT JACKS (31).

#### 23. ZONE LEVEL VOLUME OUTPUT CONTROL -

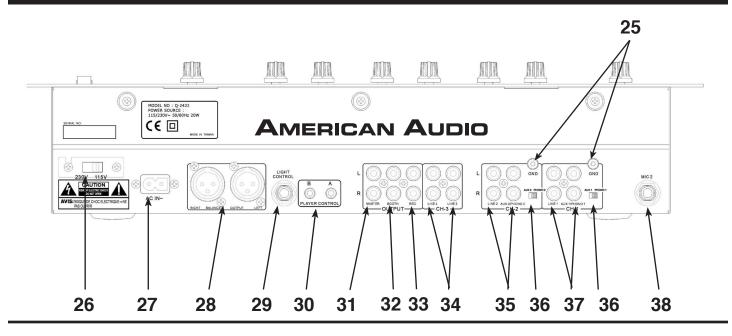
This rotary knob is used to control the zone level volume. The zone level is not PFL, it is essentially a second master output volume with separate output volume control.

#### 24. ZONE LEVEL EQ SECTION -

**TREBLE CONTROL** -This knob is used adjust the high frequency output of the **ZONE LEVEL VOLUME OUTPUT (23)**. Turning the knob in clockwise direction will increase the high frequency output, turning the knob in a counter-clockwise direction will decrease the high frequency output.

**BASS CONTROL** - This knob is used adjust the low frequency output of the **ZONE LEVEL VOLUME OUTPUT (23)**. Turning the knob in clockwise direction will increase the low frequency output, turning the knob in a counter-clockwise direction will decrease the low frequency output.

# **REAR PANEL - CONTROLS AND FUNCTIONS**



#### 25. GND (GROUND TERMINALS) -

Connect the ground lead of the turntables with these terminals. This will reduce humming and popping noises. There are two convenient ground terminals located on the rear of the mixer.

#### 26. AC VOLTAGE SELECTOR -

Select between 115V/50Hz or 230V/60Hz. Make sure that the selector is set to the proper voltage you are using.

#### 27. AC CONNECTION -

This connection is used for your detachable AC power cord. Be sure to only plug your unit in to the recommended power supply.

#### 28. BALANCED XLR MASTER OUTPUTS -

The Master Output includes a pair **XLR BALANCED JACKS** as well as a pair **RCA UNBALANCED JACKS (31)**. The 3-pin XLR jacks send a high current balanced output signal. These jacks should be used when you will be driving an amp or other audio equipment with a balanced input, or whenever you will be running a signal line greater than 15 feet.

#### 29. LIGHT CONTROL OUTPUT -

This jack provides a preset mono audio output signal. There is no way to adjust this level, however this level will directly reflect the output level of the **CHANNEL SLIDERS (6)**. This buffered audio output should only be used with light controllers that can accept an external audio input signal. Great for Touch Panels and Chase Controllers.

#### 30. PLAYER CONTROL -

These jacks are used to input 1/8" mono mini plugs from a compatible American Audio "Q" series CD players also featuring Fader "Q" Start. This feature is used to remote control a CD player. By moving the mixer crossfader (30) from left to right you can start and pause a "Q" series compact disc player. In other words, when the mixer crossfader is to the left, and you move it at least 20% to the right, any player connected to the "B" PLAYER CONTROL will begin to play. When the crossfader is to

# **REAR PANEL - CONTROLS AND FUNCTIONS**

the right, and you move it at least 20% to the left position, any player connected to the "A" PLAYER CONTROL will begin to play. You can create great effects similar to scratching with this feature.

#### 31. RCA MASTER OUTPUTS -

The Master Output includes a pair **XLR BALANCED JACKS (28)** as well as a pair **RCA UNBALANCED JACKS**. The RCA jacks send a low current unbalanced output signal. These jacks should only be used for shorter cable runs to signal processors or looping to another mixer. For cable runs greater than 15 feet use the **XLR BALANCED JACKS (28).** 

#### 32. ZONE LEVEL OUTPUTS -

The RCA jacks send a low current, unbalanced output signal. These jacks should only be used for shorter cable runs to signal processors or looping to another mixer.

#### 33. REC OUT -

This is a low current unbalanced output source designed for various tape and CD recorders. The Record Out (REC OUT) level is dictated by the **CHANNEL FADER LEVEL (6)**, it is not influenced by the **MASTER VOLUME CONTROL (13).** 

#### 34. CHANNEL 3 - LINE 3/ LINE 4 RCA INPUT JACKS -

Connect CD players or Tape Decks to these line level inputs. Line level musical instruments with stereo outputs such as Rhythm Machines or Samplers should also be connected to LINE inputs. Turntables should only be connected to "Phono" inputs. The red colored RCA jack represents the right channel input and the white represents the left channel input.

#### 35. CHANNEL 2 JACKS -

PHONO 2/AUX2 INPUT JACKS - The type of input must directly reflect the selected mode of the CHANNEL 2 - LINE LEVEL SELECTOR SWITCH (36). Connect turntables equipped with MM pickup cartridge to PHONO inputs (All DJ turntable use MM pick-up cartridges). CD players or Tape Decks and other line level instruments may be connected to these jacks as long as the CHANNEL 2 - LINE LEVEL SELECTOR SWITCH (36) is in the "AUX 2" position. The red colored RCA jack represents the right channel input and the white represents the left channel input.

**LINE 2 RCA INPUT JACKS -** Connect CD players or Tape Decks to these line level inputs. Line level musical instruments with stereo outputs such as Rhythm Machines or Samplers should also be connected to LINE inputs. Turntables should only be connected to "Phono" inputs. The red colored RCA jack represents the right channel input and the white represents the left channel input.

#### 36. LINE LEVEL SELECTOR SWITCH -

**CHANNEL 1 -** This switch is used to change the mode of **CHANNEL 1 - PHONO 1/AUX1 INPUT JACKS.** When connecting turntable to these jacks be sure the switch is in the PHONO position, and when using line level input devices select AUX. *Always be sure main power is* shut off before change the position of the Line Level Selector Switch.

**CHANNEL 2 -** This switch is used to change the mode of **CHANNEL 2 - PHONO 2/AUX2 INPUT JACKS.** When connecting turntable to these jacks be sure the switch is in the PHONO position, and when using line level input devices select AUX. *Always be sure main power is* 

#### **REAR PANEL - CONTROLS AND FUNCTIONS**

shut off before change the position of the Line Level Selector Switch.

#### 37. CHANNEL 1 INPUT JACKS -

PHONO 1/AUX1 INPUT JACKS - The type of input must directly reflect the selected mode of the CHANNEL 1 - LINE LEVEL SELECTOR SWITCH (36). Connect turntables equipped with MM pickup cartridge to PHONO inputs (All DJ turntable use MM pick-up cartridges). CD players or Tape Decks and other line level instruments may be connected to these jacks as long as the CHANNEL 1 - LINE LEVEL SELECTOR SWITCH (36) is in the "AUX 1" position. The red colored RCA jack represents the right channel input and the white represents the left channel input.

**LINE 1 RCA INPUT JACKS -** Connect CD players or Tape Decks to these line level inputs. Line level musical instruments with stereo outputs such as Rhythm Machines or Samplers should also be connected to LINE inputs. Turntables should only be connected to "Phono" inputs. The red colored RCA jack represents the right channel input and the white represents the left channel input.

#### 38. MIC 2 INPUT JACK -

This jack is used to a connect a microphone to the mixer. Connect you mic to MIC 2 via 1/4 inch (6.3mm) jack. The signal level will be controlled by the MIC 2 VOLUME CONTROL KNOB (18). BASS (9), MID (9), and TREBLE (9) levels can be adjusted.

# **SET-UP INSTRUCTIONS**

#### **INPUTS/OUTPUTS:**

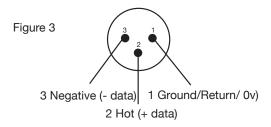
#### **OUTPUTS:**

The Q-2422/SX allows you two types of output connectors **BALANCED XLR (28)** and **UNBALANCED RCA (31, 32, & 33)**. Use these connection to connect the output signal from your mixer to the inputs of a cross-over, EQ, or other type processor. A balanced connection is recommended for cable runs longer that 15 feet. When constructing your own XLR cables follow the pin configuration describe below for proper connectivity. For cable runs shorter than 15 feet you may choose the RCA unbalanced output option. The unbalanced output option may be more convenient for most users due to the abundant supply of prefabricated RCA cables on the market.

#### **INPUTS:**

All the input options on the mixer are unbalanced RCA's. For best results do not use cable run longer than 15 feet for any incoming audio source, longer cable runs will result in inferior sound quality.

#### **Male XLR Pin Configuration:**



# Connections (Refer to the diagrams on pages 15 & 16)

Before you connect the unit's main power supply, be sure local voltage matches that of the required mixer voltage. Remember the mixer can be selected to operate with either 115v or 230v. Operational can be changed by the **VOLTAGE SELECTOR (26)** on the rear of the unit.

Be sure the power switch is in the OFF position before making any type of connections to the mixer. Also be sure the power on all units being connected to the mixer have been switched off.

Before switch the power on the mixer be sure **MASTER VOLUME (13)** is turned down and the power switch to all your amplifier are in the "OFF" position.

Connect the mixers **MASTER OUTPUT JACKS (31)** to your audio system. Make sure that the channels are set properly. When using the **BALANCED OUTPUT JACKS (30)** be sure your cable follow the above Pin Configuration (Figure 3).

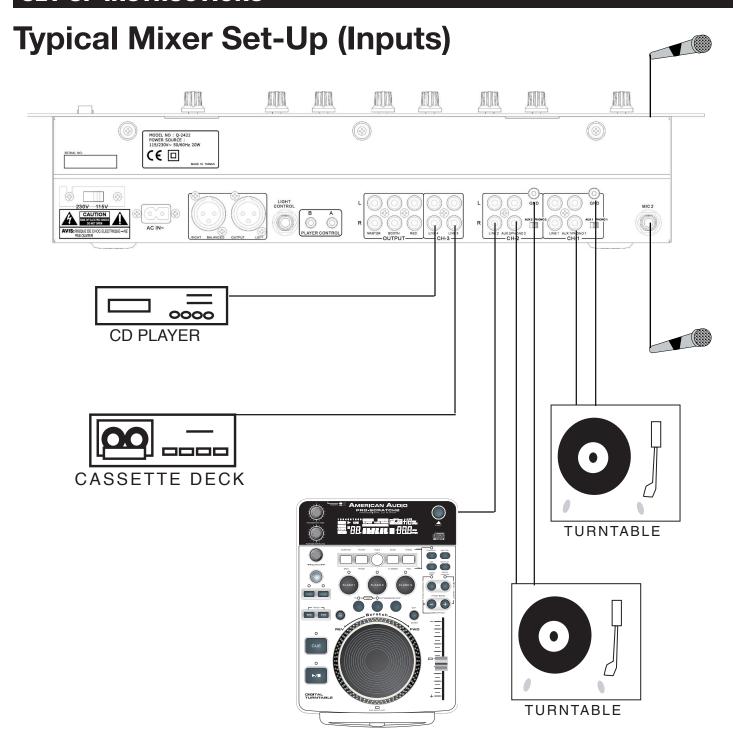
For recording, connect your tape recorder or cassette deck to the **REC OUT JACKS (33)**. The Record Out level will not be influenced by the **MASTER VOLUME CONTROL (13)**. The Record Out (REC OUT) level is dictated by the **CHANNEL FADER LEVEL (6)**.

Connect a microphone to any of the two available MIC INPUT JACKS (15 & 38).

You can connect 2 turntables using the **PHONO 1 (37)** or **PHONO 2 (35)** RCA jacks on the rear panel. The mixer will only accept turntable level signal if the **LINE LEVEL SWITCHES (36)** are in the "PHONO" position.

Connect your tape recorder, tuner, sound effects, CD player, and cassette decks etc. to the RCA **LINE LEVEL INPUT JACKS** on the rear panel. CD players, cassette decks and other line level instruments may also be connected to the **PHONO RCA JACKS** as long as the **LINE LEVEL SWITCHES** are in the "AUX" position.

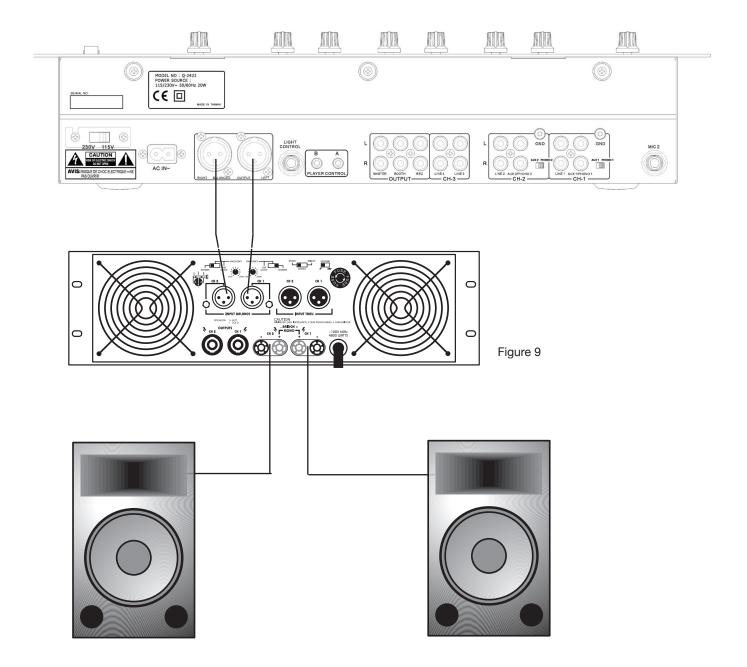
# **SET-UP INSTRUCTIONS**



This image details a typical DJ Set Up consisting of a microphone, turntables, CD players, and a tape deck.

**Note:** Turntables can only be connected to the **PHONO LEVEL RCA JACKS (37, 35)**. Be sure the **LINE LEVEL SELECTOR SWITCHES (36)** are in the "PHONO" position when using turntables.

# **Typical Stereo Set-Up (Output)**



### **Typical Balanced Output Set-up**

This image details a typical stereo output layout. Note the use of the Balanced XLR Jacks on both the mixer and the amplifier. Always use the balanced output jacks whenever possible. The balanced output jacks should always be used for cable runs in excess of 10 feet.

Using the balanced jacks will ensure a clean signal through out the entire audio system.

# **OPERATING DETERMINATIONS**

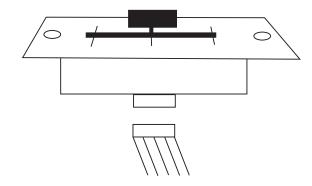
#### **Operating Determinations**

When installing this mixer, please make sure that the device is not exposed to extreme heat, moisture or dust! There should not be any cables lying around. Doing so endangers you as well as others. Do not operate the mixer in extremely hot (more than 30°C/100°F) or extremely cold (less than 5°C / 40°F) surroundings. Keep away from direct sunlight and heaters.

Operate the mixer only after becoming familiar with its functions. Do not permit operation by persons not qualified for operating the mixer. Most damages are the result of unprofessional operation!

Never use spray cleaners to clean the faders! Never use solvents or abrasive detergents to clean the mixer! It is recommended that you use a soft damp cloth. Please consider that unauthorized modifications on the device are forbidden due to safety reasons!

# **CROSSFADER REPLACEMENT INSTRUCTIONS**



The crossfader is "Hot Swappable" which means it may be replaced at any time, even when power is applied. Only replace with American Audio Part Feather Fader Plus. Replacing with any other model fader may seriously damage your unit.

#### **Replacing the Crossfader**

- 1. Disconnect the mixers main power supply
- 2. Using a number two Phillips screw driver, unscrew the each of the stainless steel retain screws that hold the crossfader in place.
- 3. Gently remove the crossfader from its seated position. You may need to wiggle the crossfader slightly to remove it.
- 4. After removing the crossfader, disconnect the ribbon cable that attaches the crossfader to the PC board. Grasp the crossfader by its base and pull the ribbon cable by its connector not the actual cables. The connector is designed to only fit one way, so don't worry about the connectors orientation.
- Connect the new crossfader to the ribbon cable and replace in reverse order.

# **TECHNICAL SPECIFICATIONS**

# **Technical Specifications - Model Q-2422/SX**

Model: Q-2422/SX™, 2 Channel Mixer

Power supply: AC 115/230V, 50/60Hz selectable

**Dimensions:** 19" W x 7" D x 2.25" H / 482x 176x 65mm

Weight: 8.5 lbs. / 3.8 kg

Crossfader: FF-Plus - Optical detecting faders start control - Low grounding impedance crossfader

**Power Consumption:** 5W typical, 7W w/ full headphone output

Headphone impedance: 16 Ohms

Input Sensitivity (Level/Impedance): Line: -14dBV (200mV) 12K Ohm +/- 2dB

Microphone: -49 dBV (3.6mV / 3K Ohms +/- 3 dB

**Phono:** -48dBV (4mV) 47K Ohms +/- 3dB **Aux:** -14 dBV (200mV) / 47K Ohms +/- 2dB

Output Sensitivity (Level/Impedance):

**Rec Out (RCA):** -10dBV (316mV) / 2.2K Ohms +/- 2dB **Master Out (RCA):** 0dBV (1V) / 610 Ohms +/-2dB

Phones (Load+32 Ohms): -8dBV (0.4V) /33 Ohms +/-2dB

Maximum Output (Load = 47K, THD = 5%)

**Rec:** < 18dBV (8V)

Master (RCA): < 18dBV (8V) Balanced (XLR): < 18dBV (8V) Channel Balance: Within 3dB

Frequency Response:

Line: 20Hz - 20KHz, ± 1dB

**Phono:** 20Hz - 20KHz, ± 1.5dB (RIAA)

**Aux:** 20Hz - 20KHz, ± 1dB

Microphone: 20Hz - 20KHz, +1,-3dB

THD - Total Harmonic Distortion (1Khz, 0dBV Output):

Master Output (Load = 47K Ohms): Less than 0.2%

Phono (Load = 32K Ohms): Less than 0.5%

Channel Equalizer:

**Bass:** +12 ± 1dB, -22 ± 2 dB at 70KHz **Mid:** +12 ± 1dB, -27 ± 2 dB at 1KHz **Treble:** +13 ±1dB, -17 ± 2 dB at 13KHz

Microphone Equalizer:

**Bass:** +12 ± 1dB, -12 ± 1 dB at 100KHz **Treble:** +12 ± 1dB, -12 ± 1 dB at 10KHz

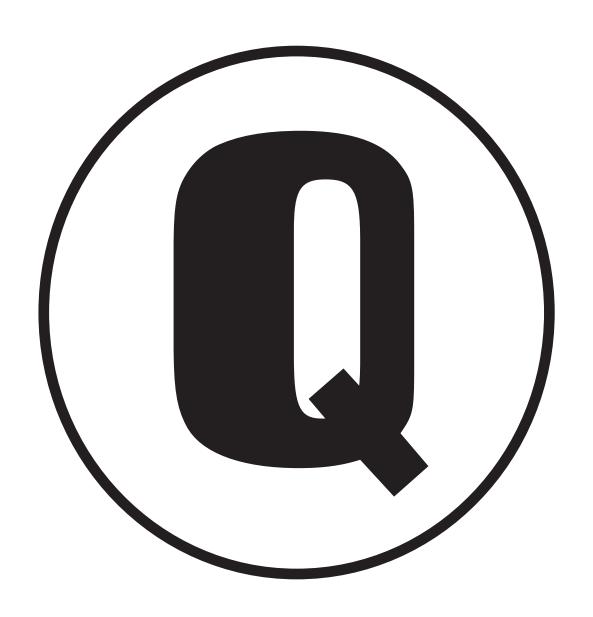
**NOTES:** 

The specifications are subject to change to any improvement by negotiations in advance. The parts are subject to change to any improvement within the range of the specifications.

#### WARRANTY

#### 2-YEAR LIMITED WARRANTY

- A. American Audio® hereby warrants, to the original purchaser, American Audio® products to be free of manufacturing defects in material and workmanship for a period of 2 Year (730 days) from the date of purchase. This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories. It is the owner's responsibility to establish the date and place of purchase by acceptable evidence, at the time service is sought.
- B. For warranty service, send the product only to the American Audio® factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, American Audio® will pay return shipping charges only to a designated point within the United States. If the entire instrument is sent, it must be shipped in its original package. No accessories should be shipped with the product. If any accessories are shipped with the product, American Audio® shall have no liability whatsoever for loss of or damage to any such accessories, nor for the safe return thereof.
- C. This warranty is void if the serial number has been altered or removed; if the product is modified in any manner which American Audio® concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the American Audio® factory unless prior written authorization was issued to purchaser by American Audio®; if the product is damaged because not properly maintained as set forth in the instruction manual.
- D. This is not a service contract, and this warranty does not include maintenance, cleaning or periodic check-up. During the period specified above, American Audio® will replace defective parts at its expense, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of American Audio® under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of American Audio®. All products covered by this warranty were manufactured after January 1, 1990, and bear identifying marks to that effect.
- E. American Audio® reserves the right to make changes in design and/or improvements upon its products without any obligation to include these changes in any products theretofore manufactured.
- F. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with products described above. Except to the extent prohibited by applicable law, all implied warranties made by American Audio® in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said period has expired. The consumer's and or Dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall American Audio® be liable for any loss or damage, direct or consequential, arising out of the use of, or inability to use, this product.
- G. This warranty is the only written warranty applicable to American Audio® Products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.



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